WHAT IS CLAIMED IS:

1. A positive active material for a rechargeable lithium battery, the positive active material comprising:

a cobalt-based compound selected from the group consisting of compounds represented by formulas 1 to 4; and

a metallic oxide coated on the cobalt-based compound;

the positive active material including secondary particles with a size of 10 to 30 ㎛, the secondary particle being prepared by gathering primary particle with a size of 1 to 5 ㎛.

$LiCoA_2$ (1)

$LiCoO_{2-x}B_x$ (2)

$LiCo_{1-x}M_xA_2$ (3)

$LiCo_{1-x}M_xO_{2-y}B_y$ (4)

where A is selected the group consisting of O, S, F and P,

B is selected the group consisting of S, F and P,

M is a transition metal selected from the group consisting of Al, Mg, Cr and Mn; Sr; or lanthanide metal selected from La or Ce;

$0 < x < 1$ and $0 < y < 1$.

2. The positive active material of claim 1, wherein the metallic oxide is selected from the group consisting of Mg, Al, Co, K, Na, Ca, Si, Ti and V.

3. A method of preparing a positive active material for a rechargeable lithium battery, comprising the steps of:

obtaining a powder from a source material, the source material being

selected from the group consisting of compounds represented by the formulas 1 to 4 and including secondary particles with a size of 10 to 30 ㎛, the secondary particle being prepared by gathering primary particles with a size of 1 to 5 ㎛;

coating the powder with a metallic alkoxide solution or a metal aqueous solution to make an metal alkoxide or metal hydrate-coated powder; and

heat-treating the metal alkoxide or metal hydrate-coated powder such that the metallic alkoxide or metal hydrate-coated powder is converted into a metallic oxide-coated powder.

$LiCoA_2$ (1)

$LiCoO_{2-x}B_x$ (2)

$LiCo_{1-x}M_xA_2$ (3)

$LiCo_{1-x}M_xO_{2-y}B_y$ (4)

where A is selected from the group consisting of O, S, F and P,

B is selected from the group consisting of S, F and P,

M is a transition metal selected from the group consisting of Al, Mg, Cr and Mn; a transition metal selected from the group consisting of Cr and Mn; Sr; or lanthanide metal selected from La or Ce;

$0 < x < 1$ and $0 < y < 1$.

4. The method of claim 4, wherein the heat-treating step is performed at 300 to 800℃ under an air or oxygen atmosphere.